even thwart entirely, certain types of competitive developments.[46] For instance, offering an inferior form of interconnection and/or access to the intelligent aspects of signaling networks may seriously degrade the overall value to the competitor of being able to interconnect its call-carrying network with the RBOCs.

While ONA is intended to be a fundamental architecture or network design, the RBOCs have continued to develop network architectures without adequately accounting for ONA principles. Indeed, as the Commission found in its Notice of Proposed Rulemaking in the Intelligent Network proceeding,

> We take this action because we believe that without regulatory initiative, IN [Intelligent Network] may not evolve in an open manner. We are concerned that LECs have been resistant to open network policies and that existing market incentives may not alone be sufficient to induce the LECs to open their networks to potential competitors [47]

Notwithstanding its concern with the RBOCs attitude towards, and progress in, unbundling their networks in the fashion envisioned by ONA, the Commission has been unable to drive the implementation of an acceptable unbundling plan in the six years since its ONA decisions.

---

[46] An historic example that illustrates this type of activity is the provision of CENTREX services. Prior to divestiture, AT&T had a widely-recognized strategy of migrating customers from central-office-based CENTREX services to customer-premises-based PBX equipment. With divestiture, the RBOCs resurrected CENTREX and made it a "flagship" service to compete with PBXs. Of the two principal kinds of N-ISDN interfaces, the RBOCs have placed heavy emphasis on the one that works in conjunction with CENTREX at the expense of the other that is utilized by PBXs. Thus in this case, a decision pertaining to the architecture of the basic exchange network is providing a competitive advantage for CENTREX vis-a-vis PBXs.

[47] See, In the Matter of Intelligent Networks, Notice of Inquiry, CC Docket No. 91-346, 6 FCC Rcd. 7256 (1991), at para. 18.

B. Network Design

After the choice of basic architecture, the next step in the creation or evolution of a network is the detailed design consistent with the selected architecture. Certain designs can facilitate competition, while other designs can thwart it. For example, the original Bell Laboratories design for cellular mobile radio systems called for treating the associated mobile telephone switching offices (MTSOs) like any other local telephone company (i.e., Class 5) switching office in the switching hierarchy. When it became apparent that the FCC was going to permit a second, competitive cellular carrier in every market, the RBOCs tried to insist that the second carrier be interconnected technically like a private branch exchange (PBX) rather than like another Class 5 office.[48] This less efficient form of interconnection reduced the possibility of cellular becoming a competitor with the wireline network.[49]

C. Network Deployment

Still another step in the creation or evolution of a network is the actual deployment of the necessary systems or subsystems. Because the RBOC networks are so enormous in terms of investment, it is typically not feasible to "roll out" new systems or new capabilities simultaneously throughout the network. For example, the equal access provisions of the MFJ could not be implemented simultaneously on all switches. The same problem appears in the ONA

---

[48] See Debra Lagapa and William Squadron, "Cellular Interconnection in the Next Phase," Telocator , April 1989, for a discussion of this history.

[49] Even today, the RBOCs do not provide cellcos with co-carrier status like that afforded independent LECs that provide non-competing local services in separate, adjacent territories. For example, the RBOCs require cellcos to compensate them for terminating traffic originated on cellular networks, but refuse to compensate cellcos for terminating traffic originating on wireline networks.

deployment practices of the RBOCs. Notwithstanding the legitimate reasons for a "rollout," this gives the RBOCs the ability to implement certain changes in the network in an order that advantages their own competitive operations at the expense of competitors who are dependent upon the network. Even more likely, it gives each RBOC the opportunity to delay changes that would benefit a competitor until the RBOC is itself ready to take advantage of the change. For example, by scattering switch upgrades throughout the network, the RBOC could make it difficult for a competitor to introduce a service that depends upon that upgrade.

D. Tactical Decisions

What has been described thus far are the strategic ways the RBOCs can extend their existing monopoly power into the broadband world and at the same time extend that monopoly power into adjacent enhanced service markets as well. The description has not included more day-to-day tactical methods by which the RBOCs can technically and operationally discriminate, such as in provisioning, quality, maintenance, restoration, etc. Once a network is in place and meets standards, it must be operated, monitored, tested, and maintained to ensure that the established quality standards continue to be met. The RBOC can discriminate in favor of its competitive operations in the process of providing necessary services, because it can expedite service to its own competitive operations while delaying it to outside firms that are dependent upon the same offerings.

An RBOC can also discriminate by doing a better job of operating, monitoring, testing, and maintaining those portions of its network upon which its own competitive operations depend. Similarly, an RBOC can notify its competitive operations sooner when there are network problems, so that the RBOC affiliate can take immediate steps to mitigate the problem

and improve customer satisfaction. And, when service is lost for some reason, the lines that the competitive operations are dependent upon can be restored sooner than those lines that belong to competitors.

Regulation cannot really address these tactical actions. The reports of installation times, etc. that the RBOCs claim are so effective may not provide enough detail to permit anyone to determine whether discrimination is occurring. Even if discrimination is proven, what can the regulators do to prevent future discrimination? The installers, technicians, etc. are effectively immune from regulatory action.

E. Network Evolution

One additional step beyond day-to-day operations that is controlled by the RBOCs is the evolution of the network itself. As noted earlier, self-instigated RBOC changes may be discriminatory. Discrimination is likewise possible when a competitor dependent upon the RBOC local exchange monopoly wants some change made in the features or functionality of the network in order to offer a new or better service. The RBOC might refuse to offer some types of network interfaces needed by competitors. The critical facts are that the outside competitor is forced to negotiate with its competitors -- i.e., the RBOC(s) -- and that the RBOCs have the ability and the incentive to treat the competitor poorly. For example, they have the power and the incentive to extract competitively sensitive information, appropriate it for their own use in competing services, and delay implementation of the requisite network changes until their own competitive operation is in a position to take advantage of the proposed change.

A familiar scenario would run as follows. The competitor asks for a technical change in the network. The RBOC professes not to understand the request technically. After considerable

delay, the RBOC might then indicate that it understands what is desired technically, but that it is technically infeasible. After considerable additional negotiations and interminable meetings, the RBOC might then say that it is technically feasible after all, but that it will take years and prohibitive amounts of money to engineer and implement the needed changes in the network. Meanwhile, the RBOC can be developing its own competitive "fighting machine," dependent upon the needed change in the network. When that development is near completion, the required network change might finally be deemed feasible. Finally, if all else fails, the RBOC can resort to pricing the offering unattractively. Each of these tactics would be difficult to prevent by regulation.[50]

In many respects, Ameritech's unbundling plan demonstrates exactly this sort of behavior. Ameritech identified the Feature Node/Service Interface (FN/SI), a predecessor to the intelligent network, back in 1985. Ameritech then proceeded to back off from that concept and side with its RBOC siblings on the subject of network unbundling -- right up to early 1993, when it abruptly offered more substantial unbundling as part of the Customer First Plan, but only in exchange for interexchange entry.[51]

In the above discussion, it was shown how an RBOC could use information concerning access customer plans for service deployment to its own strategic advantage. An RBOC could

---

[50] Problems of this general nature were discovered in the Georgia Public Service Commission investigation of BellSouth's MemoryCall service. See MemoryCall Order, *op. cit.*

[51] Ameritech has not proposed full network unbundling. For example, it is not prepared to make available interfaces between the distribution and feeder plant that would be of substantial benefit to PCS providers. See Rebuttal Testimony of Robert Mercer, Illinois Commerce Commission, Docket No. 94-0048, September 16, 1994.

also put the information it possesses concerning its end-user customer use of the local network to strategic advantage.

F. Procurement Decisions

The public policy problems associated with the choice of an optimal network architecture are compounded by the fact that the RBOCs have the power to drive the choice in a less than optimal direction to fit their own private, strategic business interests. This ability to drive technology in a particular direction stems from two sources. First, they have enormous purchasing power. That is, by installing synchronous transfer mode equipment and "narrowband" digital switching equipment, the RBOCs could signal their suppliers that they think the future network should be broadband, integrated and fiber-based for both rebuild and new construction instead of an extension of the capabilities (and the economic life) of existing twisted pair cable plant. In this case, the research and development efforts of suppliers will naturally concentrate on the broadband, integrated, fiber-based technologies at the expense of the digital technologies designed for use with the existing plant. Second, the RBOCs can act in concert to artificially drive the technology toward an integrated solution by how they direct their jointly-owned research arm, Bellcore.

V. OTHER REGULATORY SAFEGUARDS ARE NOT SUFFICIENT

One of the premises underlying the Commission's Notice is that development of non-structural regulatory safeguards since the original Computer III decision make the structural safeguards originally adopted in Computer II less important.[52] This premise is inaccurate.

---

[52] Further Remand NPRM, *op. cit.*, at pp. 19-20.

Regulation is extremely limited in its ability to detect and remedy problems. Experience with the Joint Cost Allocation Rules shows that they are inadequate to protect against cross-subsidy and discrimination. Although not a panacea, structural separation does provide substantially more protection against discrimination and cross-subsidy than non-structural safeguards. Before discussing specific safeguards, the next section addresses the general problem with non-structural regulatory safeguards.

A. Regulation Is Inherently Flawed

Regulation is an imperfect instrument for social control.[53] There are many reasons for this, but two factors are particularly important here. First, regulators must rely on imperfect information about virtually everything relevant to the decisions they make. They do not know what technologies the local telephone companies should use, the underlying costs of the technologies actually implemented, or what these costs would be if appropriate technologies were adopted.[54] Second, regulation does not change the incentives that companies have to use market power to increase their profits. Firms will react to, or "game," any regulation in order to maximize their profits. Only if regulators were omniscient could they prevent all evasions.

The assumption that regulators have adequate resources is not accurate either, which exacerbates the imperfect information problem.[55] Moreover, the communications industry is

---

[53] See Paul Joskow and Roger Noll, "Regulation in Theory and Practice: An Overview," in Gary Fromm, ed., Studies of Public Regulation, 1981.

[54] See the Affidavit of Roger Noll, filed in the Triennial Review Proceeding, October 15, 1990, pp. 18-33, for a discussion of the inability of regulators to prevent anticompetitive conduct.

[55] The resource constraints are discussed in Section V.F.

characterized by rapid technological change, which means that the value of information the regulators do possess depreciates rapidly.

These problems do not imply that regulation should be abandoned. Imperfect control of market power is better than no control at all. But any cost/benefit analysis of the decision to eliminate structural safeguards must understand the limitations of the alternative regulatory tools at the disposal of the Commission.

B. Incentive Regulation

Contrary to assertions by telephone companies in other proceedings, price cap regulation plans do not eliminate incentives for telephone companies to engage in cross-subsidy.[56] The theory is that, with prices capped, a monopoly telephone company is unable to receive any benefits from cost misallocations. Increased costs in a market where prices are capped do not translate into increased revenue and profits.[57]

In practice, incentive regulation does not eliminate RBOC incentive or ability to cross-subsidize competitive services. The Commission and most state incentive plans have not completely divorced prices from rate of return. Therefore, regulators continue to utilize RBOC profits as a factor in setting price caps, and because they care about profits, they have to measure

---

[56] See Affidavit of Rivera, Firestone and Halprin, Motion of Four RBOCs, Appendix 31, p. 51. Also, Michael A. Crew and Paul R. Kleindorfer, Appendix 8, p.6, argue that "... the price-cap approach eliminates the incentive for a regulated firm to shift to its regulated activities various costs from other lines of business not subject to rate-of-return regulation."

[57] For a discussion of incentives under price caps see the "Symposium on Price-Cap Regulation," The Rand Journal of Economics, Autumn 1989, pp. 369-472.

costs. As a consequence, costs are still relevant to the decision-making calculus of a regulated firm.

If an incentive regulation plan has a set term, the regulated firm will want to position itself to be in an optimal position at the end of the term. If earnings are high, it may choose to "spend" those earnings by investing or pricing strategically and thereby show a lower return when earnings are being evaluated. If instead, the incentive plan has earnings boundaries, costs are relevant during the entire life of the plan.[58]

Even if the plans nominally ignore profits and have no set termination date, long term considerations are likely to reintroduce profits and costs into the decision-making calculus. As Ron Braeutigam and John Panzer point out:

> A regulatory agency is likely to be subjected to considerable pressure to change the price cap or price-cap-formula over time. If a firm regulated by price caps begins to earn large profits, consumers will no doubt petition the regulator to lower the price in a core market. On the other side, if profits are very low, a regulated firm may seek a higher core service price cap on the grounds that a higher price is needed to preserve financial viability.[59]

In other words, it is difficult for regulators to commit to a true price cap plan.

A brief review of the Commission's Rules shows why the local telephone companies continue to have an incentive to misallocate costs.[60] The price cap rules specifically retain the core of the rate of return regulation scheme. After a price cap carrier exceeds the prescribed rate

---

[58] Ron Braeutigam and John Panzer, "Diversification Incentives Under 'Price-Based' and 'Cost-Based' Regulation," *id.*, p. 389, point out that the desirable efficiency properties of price caps are unlikely to be realized if the cap depends on carrier performance.

[59] *Id.*, p. 389.

[60] Parts 61 and 69 of the Commission's Rules contain the price cap regulations.

of return, it must "share" a portion of the excess earnings with customers.[61] Sharing is implemented through price reductions in the next annual access tariff review. On the other hand, if a carrier's earnings fall below the rate of return prescription by a certain amount, it is able to automatically adjust rates upward the next year. In essence, price caps reduce to rate of return regulation with some earnings flexibility. If a carrier is near the upper or lower adjustment bands in earnings, full rate of return incentives apply. Even for carriers that elect high productivity offsets and thus avoid sharing, rate of return will be monitored.

MCI has demonstrated that, under price caps, many RBOCs have shown a pattern of booking large fourth quarter expenses. The increased expenses have the effect of reducing earnings, thus helping the carriers to avoid sharing, or to share lesser amounts.[62] This is an example of how price caps affect costing decisions.

In addition, the price cap rules explicitly, and necessarily, require cost showings for new services. There is an obvious incentive to show high costs so that the price cap for the new service will reflect these artificially inflated costs. The local telephone company does not have to offset that high price with a lower price for some other service in order to stay within the cap constraint. New services are obviously a critical concern for ESPs who, as discussed in Section

---

[61] The Commission has just recently modified its price cap rules. If a carrier elects a high productivity offset, it is allowed to retain excess earnings. It appears, however, that profits will still be monitored.

[62] See Comments of MCI Telecommunications Corporation, In the Matter of Price Cap Performance Review for Local Exchange Carriers, Comments, CC Docket No. 94-1, May 9, 1994, pp. 33-34.

III, would receive enormous benefits from new network capabilities that are not yet offered for sale by the local telephone companies.

State price cap or incentive regulation plans have similar problems. Not all state plans have rate of return considerations directly built into them as the Commission's plan does. However, most have a specific term or length after which a regulatory review that considers costs and rate of return will take place. In any event, given the fact that regulators and politics change, the local telephone company must always consider that there is some probability that cost regulation will be reimposed, even if there is no fixed term or period between regulatory reviews.

Finally, Price Cap Rules typically allow the local telephone companies considerable discretion in the setting of the prices for individual rate elements. For example, in the Commission's Price Cap Plan, the companies have considerable discretion to set individual prices within baskets. This is particularly important for ESPs because BSE prices can be changed strategically to favor the RBOCs own enhanced services by raising the prices of BSEs they purchase more intensively and lowering the prices of BSEs purchased more intensively by their competitors.

C. Cross-Subsidy and Accounting Rules

Enforcement of FCC accounting rules, including the Joint Cost Rules, will not prevent cross-subsidy.[63] First, the Commission's Rules are obsolete and ineffective. Second, the Commission's tariff review process, which is the mechanism through which much of the accounting regulation is enforced, is seriously flawed. Third, enforcement resources are

---

[63] See Kelley Declaration, *op. cit.*, at p. 37.

inadequate. Even if all of the above were not true, conduct regulation is simply a crude tool for social control. These problems are exacerbated by rapidly changing telecommunications technology.[64]

Most of the rules that make up the current cost allocation systems are designed for decades old telecommunications technologies. Revision of the rules to reflect today's technology is not a solution. Given rapid technological changes and local telephone company control over technology choices, and the pace at which they are implemented, any such revision would soon be obsolete. As the Commission recently noted:

> ...such accounting rules can be rapidly overtaken by technological or marketplace changes. Joint petitioners, for example, supported in their pleadings the establishment of accounts to identify loop investment as either copper or fiber. Such accounts, had we adopted them in 1992, would no longer serve the purposes envisioned by their proponents because carriers have since that time developed proposals to incorporate a third transmission medium, coaxial cable, into the loop.[65]

In other words accounting regulation is inadequate to keep up with technological change.

The Joint Cost Rules contained in Part 64, or more accurately, the individual telephone company Cost Allocation Manuals (CAMs) that implement those rules, start with the detail recorded in the Commission's Part 32 USOA accounts. Therefore, to the extent that Part 32 does not reflect the changes in the network and the competitive environment, Part 64 suffers from the same considerable problem.

---

[64] See Declaration of Robert Hall. MCI Comments to DOJ, Exhibit 2, pp. 9-11.

[65] See, In the Matter of Telephone Company Cable Television Cross-Ownership Rules, Memorandum Opinion and Order on Reconsideration and Third Further Notice of Proposed Rulemaking, CC Docket 87-266, released November 7, 1994, p. 80.

Moreover, a tremendous amount of discretion is built into the process of designing and implementing the CAMS. The RBOCs are large and complex organizations using complicated and sophisticated technology and undergoing rapid technological change. No Uniform System of Accounts or Cost Allocation Manual can realistically hope to capture this reality. Judgments, sometimes arbitrary, have to be made at every stage of the cost data collection and allocation process. The cumulative effects of many judgments about how to classify dual-or multi-purpose equipment may lead to significant cost misallocation, even within the bounds of all applicable rules and regulations.

The RBOCs have argued that the problem of the allocation of costs between regulated and unregulated services is solved by requiring fully distributed costing.[66] The argument is that by requiring unregulated services to bear a portion of joint costs, a bias against cross-subsidy has been put into the system, thus guaranteeing that consumers of regulated services receive at least some benefits from economies of scope.[67] However, if there are no real economies of scope from joint provision of regulated and unregulated services, and if the telephone company has selected a technology with high common costs, then consumers of regulated services could be

---

[66] See Affidavit of Rivera, Halprin and Firestone, *op. cit.*, at p. 38. Under Fully Distributed Cost (FDC) costing, shared costs that cannot be unambiguously attributed to individual services are allocated among services on the basis of some essentially arbitrary basis, such as relative minutes of use, circuit miles, etc. For a description of FDC allocators and the welfare effects of employing them, see Ronald R. Braeutigam, "An Analysis of Fully Distributed Cost Pricing in Regulated Industries," The Bell Journal of Economics, Spring 1980, pp. 182-196.

[67] *Id.*

overcharged anyway.[68] Moreover, this approach assumes that all directly assignable costs have been identified and assigned correctly. This is a heroic assumption given the complexity of both the technology and the cost manuals.

D. The Tariff Review Process Is Flawed

The FCC's ability to prevent the anticompetitive pricing and discrimination is severely limited. For the most part, the Rules described above are enforced through the tariff review and the complaint processes. A detailed examination of how these processes actually work demonstrates that they do not prevent the RBOCs from exercising market power.

There are three fundamental problems. First, the lack of any credible threat of meaningful enforcement or serious penalties for violations robs the system of any deterrent value. Violations seldom carry any sanctions. Second, when investigations or enforcement proceedings are initiated, they take so long to complete that the competitive harm can be substantial. Their competitive affiliates can take advantage of any unlawful pricing while the rates are in effect. Thus, there is little incentive for the RBOCs to "get it right"in the first place. Finally, given scarce Commission resources, an avalanche of RBOC filings precludes thorough regulatory review of most of their actions. Commission resource constraints are discussed next.

E. The Commission's Resources Are Inadequate

Commission resources are traditionally insufficient to police tariffs, even when the rules being enforced are clear and sufficiently detailed. The Tariff Division, which is responsible for evaluating RBOC tariffs, received about 2,700 tariff filings and over 200,000 pages of support

---

[68] See Kenneth Baseman, "Open Entry and Cross-Subsidization in Regulated Markets," in Gary Fromm, ed., Studies in Public Regulation, 1981.

information in 1990.[69] Due to resource constraints, the Commission no longer collects this tariff filing information. In addition to reviewing tariffs, the Division is responsible for docketed Investigations, Rulemakings, Petitions for Reconsideration, Applications for Review of prior orders, and Petitions for Waivers of the Rules. The authorized strength of the Tariff Division is 17 lawyers and 11 economists or public utility specialists.[70]

The Commission as a whole does not have the resources to move into the Tariff Division or into the Accounting and Audits or Enforcement Divisions, which are also key links in the Commission's enforcement chain. A May 24, 1993 letter from then Chairman Quello to the Chairman of the House Committee on Government Operations bears quoting in detail:

> The Commission has considered the possibility of increasing audit resources by reassigning staff from other Common Carrier Bureau (CCB) operations. However, all other CCB operations also face severe staffing shortages coupled with increasing workloads. This is the result of the same budgetary constraints that have prevented us from hiring additional auditors. For example, the volume of formal complaints filed with the CCB Enforcement Division almost tripled from 51 in FY 1985 to 133 in FY 1992 -- and even reached a high of 458 in FY 1990. These complaints are becoming more complex as parties use the formal complaint process to resolve private disputes, often involving substantial dollar amounts. Yet the formal complaints staff, after doubling the number of formal complaint attorneys between FY 1989-92, still numbers only 23 -- including 2 paralegals, a secretary and a clerk trainee.[71]

---

[69] These data were collected by the Tariff Division.

[70] One of the results of this chronic shortage of resources is that there is no official record of tariff filings available to the public. The accuracy of the informal tariff log that is available is not guaranteed, and entries are sometimes missing. The streamlined notice period that affects many tariffs makes filing a petition almost impossible. In these cases petitions must be filed six days (counting holidays) from the time a tariff is filed. In the absence of an official tariff log, parties lose a day at a minimum, or worse never even know about a tariff filing.

[71] Letter from James Quello to Honorable John Conyers, May 24, 1993, p. 2.

Chairman Quello went on to note that cable regulation and the overturn of the Commission's forbearance policies, which resulted in the requirement that all common carriers file tariffs, have also added substantially to the Commission's workload.

Chairman Reed E. Hundt echoed these concerns before the House Telecommunications and Finance Subcommittee:

> The strain of inadequate resources at the Commission is evident in several respects. The infrastructure of the agency, from where it houses its employees to the quality of its equipment, is in need of substantial upgrading. More critically, the agency is woefully short of human resources. Staff must be marshaled from around the entire agency to ensure expeditious resolution of any significant matter.[72]

The Chairman testified that for these reasons, "the inadequacy of the Commission's current resources has reached crisis proportion."[73] Chairman Hundt also pointed out that between 1980 and 1993, the number of full-time equivalent positions at the Agency had fallen from 2,200 to 1,724.[74] The additional staff that the Agency's 1994 appropriation permitted it to hire will not restore staffing to the 1980 level. Moreover, the increase in staff was designed specifically to implement the Cable Act, and will do nothing to relieve the critical shortages in other areas of regulation.

---

[72] See, "Testimony Concerning the 1995 Authorization Act for the Federal Communications Commission," May 26, 1994, p. 2.

[73] *Id.*, p. 1.

[74] *Id.*, p. 5.

The Commission's inability to do any serious enforcement is well documented by various General Accounting Office audits over the years.[75] The limited audits that the Commission or NARUC have conducted inevitably unearthed problems. The probability of detection is so small, and the consequences so small, that there is little incentive for the RBOCs to police themselves.

VI. GROWING COMPETITION IN THE ENHANCED SERVICE MARKET DOES NOT PROVE THAT UNBUNDLING IS UNNECESSARY

The Commission asks whether development of competition in the enhanced service market obviates the need to require structural safeguards. The answer is clearly no. First, enhanced service providers are still depend on access to local telephone company networks. The degree of competition in the dependent market does not change this fact. With this dependence comes the incentive and opportunity for local telephone companies to behave anticompetitively. Second, an examination of how competition is evolving in the enhanced service business shows that the services being offered are incredibly diverse. This provides the local telephone companies with the opportunity to use discrimination to reduce competition in particular enhanced service markets. Finally, implicit in the Commission's argument is the notion that competition has developed as a result of application of its non-structural safeguards. In fact, competition in enhanced service markets has grown in spite of, and not because of, Commission policies.

---

[75] See U.S. General Accounting Office, FCC's Efforts to Control Cross-Subsidization, February 1993, for a recent example.

A. Enhanced Service Provider Reliance on Access to Local Telephone Networks Provides the Incentive and Opportunity for Discrimination.

As discussed in Section I, the simple fact is that, in their respective regions, the local telephone companies still control the only local, two-way, switched communications network available to the vast majority of Americans. While these local exchange networks were originally designed for ordinary voice communications, they also remain the only widely available, local, two-way switched communications networks on which most enhanced services rely. Moreover, in most instances, the RBOCs also still control the only local, dedicated, two-way wideband and broadband, facilities available for the origination and termination of large volumes of voice and data traffic in their respective geographic areas.

The growth to date in the number of ESPs does nothing to change the fact of the local monopoly. The incentives that local telephone companies have to use their control over the local exchange are not reduced as the number of enhanced service providers increase. Local telephone company profits can still be increased by discrimination and cross-subsidy. Indeed, as the market has grown, the opportunities for discrimination have grown with it. Finally, with the growth and increasing diversity of the enhanced service markets, the job of policing local telephone company behavior is all the more difficult.

Due to the failure of the Commission's ONA policies, enhanced service competition has, by default, evolved using fairly simple interfaces to the local telephone network. Evolving technology together with further unbundling will affect the way in which enhanced service providers may want to interconnect with local telephone networks (See Section III). Therefore,

today's state of competition may not be a particularly reliable guide to how enhanced service competition will evolve in the future.

B. Enhanced Service Markets Are Diverse

There is not a single enhanced service market. Instead the enhanced service business consists of a wide variety of individuals services ranging from voice mail to general interest videotext services to special purpose business oriented on-line information services. Many of these individual services may occupy individual antitrust markets that could easily be monopolized through local telephone company discrimination, even if there are multiple competitors today. Therefore, an anti-competitive strategy makes sense because the RBOCs can eliminate competition one market at a time.

C. Enhanced Service Competition Is Not Due to Commission Policies

Competition in enhanced services markets is evolving despite, and not because of, Commission policies. Most of the services discussed in the previous section are accessed over ordinary dial-up telephone lines. These lines were available prior to Computer III. The success of these services has not depended on the use of unbundled features and functions within the local telephone network. This is not to say that these services could not benefit from reasonably priced access to such features.

It would not be appropriate to argue, as the Commission implicitly does, that the growth of enhanced services is due to Commission policies. The failure of ONA has likely prevented some features and functions from being added to these services, which would promote their growth. For example, electronic mail services could benefit from availability of a "message waiting" indicator on lines used for accessing these services. Similarly, these services would

benefit greatly from widespread access to ISDN lines, which would allow much faster download of information and more rapid printing of information to computer screens. The local telephone companies have restricted the functionality of ISDN.

One enhanced service where competitors have had to rely on access to network features and functions is voice messaging services (VMS). Not surprisingly, there have been competitive problems in the VMS market, manifested most notably in the Georgia MemoryCall case.[76] In that case, BellSouth had entered the voice message service (VMS) market with a product known as "MemoryCall." However, competing VMS providers had long alleged that BellSouth was blatantly and systematically discriminating against them by choosing not to provide service competing VMS providers requested, by offering services BellSouth's VMS product could use without regard to the needs of independent VMS provider needs, and by establishing predatory prices for MemoryCall services.

In its investigation into allegations of BellSouth abuse, the Georgia Public Service Commission determined that BellSouth had (1) both the ability and the incentive to abuse its monopoly control over the local telephone network, and (2) in fact had abused that monopoly control in order to gain an unfair advantage over competing VMS providers:

> The Commission has determined that SBT [Southern Bell Telephone] has the opportunity and incentive to behave anticompetitively in that [VMS] market in order to favor its MemoryCall service over other competitive VMS options. The Commission has further determined that SBT has in fact behaved anticompetitively with respect to its trial offer of MemoryCall service, with inevitable and likely irreparable damage to the VMS marketplace. The full scope and extent of this damage and of SBT's anticompetitive behavior cannot presently be determined by the Commission, given SBT's failure to comply with the

---

[76] Memory Call Order, *op. cit.*

> Commission's earlier directive that SBT file with the Commission sufficient cost data to allow a determination as to whether MemoryCall service is being predatorily priced.[77]

This was a problem that occurred despite explicit Commission Rules to deter such behavior. This conduct took place notwithstanding a CEI plan for MemoryCall services that had been approved by the Commission.[78]

VII. A COST/BENEFIT ANALYSIS DEMONSTRATES THAT THE COMMISSION SHOULD NOT GRANT STRUCTURAL RELIEF TO LOCAL TELEPHONE COMPANIES

The costs of eliminating structural separation would likely far exceed the benefits. The potential costs include:[79]

- Risk of anticompetitive behavior
- Cost of the antitrust suits that would follow
- Costs of litigation and enforcement when access arrangements are not identical
- Additional cost of enforcing accounting rules in the face of larger common costs
- Negative incentive effects of failing to enforce the original ONA requirements
- The need for more enforcement resources on the Commission's part
- Additional regulatory burdens on RBOCs due to the need to make compliance filings

The theoretical benefits include the following:

---

[77] *Id,*. at pp. 3-4.

[78] BellSouth Plan for Comparable Efficient Interconnection for Voice Messaging Services, 3 FCC Rcd 7284 (1988).

[79] Costs and benefits were discussed in Kenneth C. Baseman and Stephen D. Silberman, The Economics of Line of Business Restrictions and Structural Separations, January 20, 1986, filed with MCI Computer III Comments.

- Realization of economies of scale and scope
- RBOCs might offer new services

It is clear that there are costs of abandoning structural separation. Structural separation will serve to reduce discrimination and cross-subsidy. Anticompetitive behavior by the RBOCs can damage the evolution of critical enhanced service markets, and thereby impose substantial costs on consumers. This consideration must play a key role in any cost/benefit analysis.

Further unbundling is even less likely to occur unless and until such time as the RBOCs come to realize it is in their own interests to increase network utilization by stimulating use of unbundled network elements. As noted in Section I, further unbundling would produce enormous benefits, not only in the enhanced service market, but also in long distance and local exchange markets. Eliminating structural separation rules now eliminates any inducement to further unbundling.

In a similar vein, the cost of establishing structurally separated subsidiaries for services that are already being offered on an integrated basis is not, from a public policy perspective, a legitimate cost to be considered. To give the telephone companies "credit" for these expenses in a cost-benefit analysis would reward them for the bait and switch tactics that were used to gain structural relief in the first place. Any short term efficiency gains created by allowing the telephone companies to continue integrated operation could be outweighed by the incentive created to attempt to manipulate the system again in the future.

The costs of eliminating structural separation requirements are likely to far exceed any benefits. These costs,which include anticompetitive behavior and all of the negative consequences of that behavior, may reduce dynamic efficiency in the economy as a whole due to

the key role that ESPs are playing in developing the information economy. The benefits, if any, have never been demonstrated.

RBOCs are already allowed to compete in enhanced services markets. As discussed above, it is generally conceded that most of these markets are competitive, with an increasing array of services being made available to consumers from a variety of providers. The explosive growth of the Internet, discussed in Section III, has multiplied the services available to consumers and businesses on line at a virtually exponential rate. Given this robust competition, elimination of structural separation rules could increase diversity in the enhanced service markets only if the RBOCs would thereby be induced to offer enhanced services that they would not offer otherwise and that no other provider would be willing to offer. This is likely only if there are services that RBOCs are uniquely positioned to offer. In turn, this is likely to be the case only if there are economies of integration they are uniquely in a position to exploit.

The RBOCs have never demonstrated benefits to technically integrating information services within the local telephone network. Indeed, the original concept of ONA, which the local telephone industry endorsed, is itself inconsistent with the notion that there are such economies. If a network is truly open, any customer can take advantage of all of its features and functions.

If, on the other hand, the RBOCs can demonstrate that there are services that could not be made available by <u>any</u> providers absent structural integration for RBOC enhanced services, the

Commission can grant them flexibility through waivers on a case by case basis.[80] Broad elimination of structural safeguards that provide protection to competitors is not necessary.

[80] They would, of course, need to demonstrate that the lack of providers is not caused by an RBOC failure to provide appropriate interfaces to their network elements.

HATFIELD ASSOCIATES, INC.

737 29th Street, Suite 200
Boulder, Colorado 80303
(303) 442-5395

Statement of Qualifications

General Qualifications

Hatfield Associates, Inc. (HAI) is an interdisciplinary consulting and research firm serving a wide range of clients with stakes in the telecommunications field. The firm has provided consulting and educational services in nearly all aspects of the present and future telecommunications infrastructure, including local exchange networks, cable television systems, competitive access services, land mobile and personal communications, long haul terrestrial and satellite communications, data communications, and customer premises equipment.

Principals of the firm include consultants with graduate degrees and decades of senior level experience in engineering, economics, business, and policy/regulation. HAI's services include, among others, regulatory filings and policy studies, engineering studies, expert testimony, market research, economic studies, "due diligence" support, business planning, education and system development.

Examples of recent consulting assignments include:

- Analyzing the potential for competitive entry into the local exchange telecommunications business, presented in a paper entitled "The Enduring Local Bottleneck: Monopoly Power and the Local Exchange Carriers";

- Developing material on telecommunications technology for inclusion in a report on international telecommunications prepared by the Office of Technology Assessment of the U.S. Congress;

- Preparing a report entitled "Cross-Subsidy Concerns Raised by Local Exchange Company Provision of Video Dialtone Services" that was attached to a petition filed with the Federal Communications Commission (FCC) by the National Cable Television Association and the Consumer Federation of America;

- Managing the regional hub field testing program for Cable Television Laboratories;

- Assisting a client in the preparation of comments in an FCC proceeding dealing with the future of the private land mobile radio services;